

THE TYPE-SPECIES OF *SIPHONA* MEIGEN, 1803, AND
HAEMATOBIA LEPELETIER AND SERVILLE, 1828 (INSECTA :
 DIPTERA). Z.N.(S.) 195

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The present case of a misidentified type-species, presented under Article 70a of the International Code of Zoological Nomenclature, involves names of important genera and tribes in two families of flies, the Tachinidae and Muscidae.

(A) *Siphona* Meigen

2. The generic name *Siphona* Meigen (1803) is currently being used in two different families of the order Diptera, in the parasitic family Tachinidae for a large and cosmopolitan genus of small flies, and in the Muscidae, at least by some authors, for an important genus of bloodsucking flies that includes the horn fly, the buffalo fly of Australia, and their relatives. *Siphona* clearly and admittedly was based on a misidentified type-species. The present application is intended to settle that issue and to resolve the confusion of such divergent usage.

3. An earlier name of slight usage, *Crocuta* Meigen (1800), has been removed from consideration by the Commission's Opinion 678 (1963), which suppressed Meigen's 1800 pamphlet.

4. *Siphona* Meigen (1803 : 281) was published with a brief description that contained two salient features, a bare antennal arista ("mit einer nackten Borste an der Wurzel") and a geniculate proboscis ("Der Rüssel wagerecht, vorgestreckt, gebrochen"). One species was included, cited as "*Stomoxys irritans* Fabr.". Fabricius never proposed such a name, however, nor did he claim it. Under *Stomoxys irritans* he cited *Conops irritans* Linnaeus.

5. The nominal type-species has been interpreted in two different ways, each unlike what Meigen actually had before him: (1) As true *irritans* Linnaeus, of which *irritans* of Fabricius was a misidentification, and (2) as *Stomoxys stimulans* Meigen (1824), which according to Meigen (1824) was the species that Fabricius really had. However, both *irritans* of Linnaeus and that of Fabricius are unquestionably not what Meigen described as *irritans* in his new genus *Siphona*; rather they have long rays or side hairs on one or both sides of the arista and a straight porrect proboscis, characters in direct conflict with Meigen's description. Thus in this case we are dealing with Meigen's misidentification of Fabricius' misidentification of the Linnaean species! Meigen himself early recognized the errors and corrected them (1824 : 155, 161-2). Using the generic name *Stomoxys* (now confined to the stable fly, *S. calcitrans*, and its relatives, and not part of the present problem), Meigen recognized true *irritans* Linnaeus (the common and widespread pest known in English as the horn fly), described the Fabrician "*irritans*" as *Stomoxys stimulans*, and recognized the small fly with geniculate proboscis as *Siphona geniculata* (De Geer), now in the family Tachinidae. These specific assignments have been followed to the present time. Coquillett (1910 : 606) presumed that Meigen's "*Stomoxys*

irritans Fabr.” was in reality a lapsus for *Stomoxys minuta* Fabricius, a small tachinid synonymized by Meigen (1824 : 155) under *Siphona geniculata*, but unfortunately for that assumption *minuta* was not described until 1805, two years after Meigen’s mention of “*irritans* Fabr.” under *Siphona*.

6. Clearly, Meigen (1803) actually had before him the small tachinid when he described *Siphona*, and I propose that this tachinid be designated under the plenary powers as type-species of *Siphona*. This designation would resolve the confusion of the family position of *Siphona*, would remove the name from consideration in the family Muscidae, and would confirm the wide usage of *Siphona* and Siphonini in the family Tachinidae.

(B) *Haematobia* Lepeletier and Serville

7. *Haematobia* Lepeletier and Serville (1828 : 499), one of the most commonly used names for the horn fly and its relatives, has also been interpreted in different ways, and thus in some classifications used for different genera or subgenera. Obviously it is desirable to clear up this confusion and give taxonomists a clearcut answer. Unlike *Siphona*, the various alternatives are in the same family, subfamily, and tribe: Muscidae, Stomoxyinae, and Haematobiini.

8. *Haematobia* was proposed for two species, *Stomoxys stimulans* Meigen and *S. irritans* (Linnaeus). The earliest type designation was by Westwood (1840 : 140) as “*S. irritans* L.”, and this designation has been accepted by Coquillett (1910), Hennig (1964), Hockett (1965), and Bequaert, Malloch, and other authors on the Muscidae. However, two facts cloud the case, and these should be clarified.

(a) Westwood cited the genus as “*Haematobia* Desv.”, and some authors have argued that he designated a type-species for *Haematobia* of Robineau-Desvoidy but not for *Haematobia* Lepeletier and Serville. It is now clear under Article 67g that Westwood (1840) is to be interpreted as designating a type-species for the latter even though he cited the wrong author and date. Incidentally, Lepeletier and Serville (1828) also cited “*Haematobia* Robin. *ined.*” when they published the name, but Robineau-Desvoidy’s work on the higher Diptera did not appear until 1830.

(b) After “*S. irritans* L.”, Westwood cited “Meig. t. 38, f. 8”, which is a figure of the other originally included species, *stimulans*. Some authors (e.g., van Emden, 1965) have maintained that this made Westwood’s designation ambiguous and therefore invalid. Such authors have preferred to follow Bezzi’s designation (1911 : 126) of *stimulans* Meigen as the type-species of *Haematobia*. However, Westwood apparently merely cited Meigen’s figure as a published illustration of the genus and its habitus, as he frequently did for the genera included in his Synopsis. The fact remains that he did cite one name and one name only as the type-species, *irritans* Linnaeus, and I believe that this must be accepted as the valid designation. Furthermore, under Article 69a.iii: “In the absence of a prior valid type-designation for a nominal genus, an author is considered to have designated one of the originally included nominal species as type-species, if he states that it is the type (or type-species), for whatever reason, right or wrong, and if it is clear that he himself accepts it as the type-species.” Coquillett (1910 : 549) fits this provision perfectly; he

accepted Westwood's designation, and if the latter were considered invalid, then Coquillett's would be the next one eligible, antedating that of Bezzi (1912).

9. I believe that Westwood's 1840 designation of *irritans* Linnaeus as type-species of *Haematobia* is the valid one, rigidly construed, but because of the published differences of opinion, a formal decision is needed. I propose that Westwood's designation of *Conops irritans* Linnaeus as type-species of *Haematobia* Lapeletier and Serville (1828) be confirmed by the Commission.

10. Usage is divided in several ways. Some authors (e.g., Hennig, 1964) recognize only one genus and call it *Siphona*; others recognize only one genus and call it *Haematobia*; others (e.g., van Emden, 1965) place the species in two genera, *Haematobia* (with type *stimulans* Meigen) and *Lyperosia* (type *irritans* Linnaeus); still others (e.g., Malloch, 1932; Hockett, 1965) recognize two genera, one named *Haematobia* with synonym, *Lyperosia* (type of both, *irritans* Linnaeus), and a second genus whose name does not concern us here. Some who call the genus *Siphona* admit that *irritans* is type of both *Haematobia* and *Lyperosia* (e.g., Hennig, 1964). Some who recognize only one genus *Haematobia* divide it into subgenera, but differ in usage as to whether *irritans* is or is not accepted as type of *Haematobia*. With this potpourri of usage, the most appropriate action appears to be to apply the rules and accept *irritans* Linnaeus as type of *Haematobia*.

(C) Other Nominal Genera

11. A number of other younger generic or subgeneric names have been proposed for various species of *Haematobia* sens. lat., such as *Lyperosia* Rondani (1856) (type-species also *irritans* Linnaeus), *Bdellolarynx* Austen (1909), *Lyperoslops* Townsend (1912), etc., but their type-species offer no problems. The classification is still open to divergent interpretations of the genera and subgenera that should be recognized, but this is a purely zoological matter, and the fate of the other names can easily be decided under the Law of Priority. The first and necessary order of business is to settle the questions of the type-species of *Siphona* and *Haematobia*.

(D) Family-Group Names

12. No family or subfamily names are affected. Tribal names have sometimes been used, but classification at this level is not always used, nor agreed upon, and in the present case it seems best not to propose tribal names for the Official List.

(E) Summary

13. The International Commission on Zoological Nomenclature is hereby requested to take the following actions:

- (1) to set aside, under its plenary powers, all designations of type-species for *Siphona* Meigen, 1803, and having done so to designate *Musca geniculata* De Geer as type-species of *Siphona* Meigen, 1803;
- (2) to confirm the designation by Westwood (1840) of *Conops irritans* Linnaeus as type-species of *Haematobia* Lapeletier and Serville, 1828;
- (3) to place the following generic names on the Official List of Generic Names in Zoology:

- (a) *Siphona* Meigen, 1803 : 281 (gender : feminine) (type-species *Musca geniculata* De Geer, 1776, as designated by the Commission under (1) above);
- (b) *Haematobia* Lepeletier and Serville, 1828 : 499 (gender : feminine) (type-species *Conops irritans* Linnaeus, 1758, by designation of Westwood, 1840);
- (4) to place the following specific names on the Official List of Specific Names in Zoology:
- (a) *geniculata* De Geer, 1776 : 38, as published in the binomen *Musca geniculata* De Geer (type-species of *Siphona* Meigen, 1803) (Insecta);
- (b) *irritans* Linnaeus, 1758 : 604, as published in the binomen *Conops irritans* Linnaeus (type-species of *Haematobia* Lepeletier and Serville, 1828) (Insecta).

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